



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0239; Directorate Identifier 2010-SW-087-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Eurocopter Deutschland GmbH Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for all Eurocopter Deutschland GmbH (ECD) EC 135 P1, P2, P2+, T1, T2, and T2+ helicopters equipped with a certain main transmission housing upper part. This proposed AD would require installing a corrugated washer in the middle of the main transmission filter housing upper part and modifying the main transmission housing upper part. This proposed AD is prompted by an inspection of housing upper parts that revealed the bypass inlet in the oil filter area was not manufactured in accordance with applicable design specifications. The proposed actions are intended to prevent failure of the main transmission and subsequent loss of control of the helicopter.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- **Federal eRulemaking Docket:** Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.

- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052, telephone (972) 641-0000 or (800) 232-0323, fax (972) 641-3775, or at <http://www.eurocopter.com/techpub>. You may review copies of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

**FOR FURTHER INFORMATION CONTACT:** Chinh Vuong, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [chinh.vuong@faa.gov](mailto:chinh.vuong@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

### **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued AD No. 2010-0213, dated October 14, 2010 (AD 2010-0213), to correct an unsafe condition for the ECD model EC 135 and EC635 helicopters. EASA advises that a recent inspection on some housing upper parts for the main transmission FS108 revealed the bypass inlet in the oil filter area had not been manufactured in accordance with the applicable design specifications. EASA

advises that this condition, if not detected and corrected, could adversely affect the oil-filter bypass function, which is essential for continued safe flight. The EASA AD requires a temporary modification of the main transmission housing upper part by installing a corrugated washer, and then a “rework” of the oil filter area to bring the affected parts within the applicable design specifications.

#### **FAA’s Determination**

These helicopters have been approved by the aviation authority of the Republic of Germany and are approved for operation in the United States. Pursuant to our bilateral agreement with Germany, EASA, its technical representative, has notified us of the unsafe condition described in its AD. We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition exists and is likely to exist or develop on other products of the same type design.

#### **Related Service Information**

ECD has issued Alert Service Bulletin (ASB) ASB EC135-63A-017, Revision 0, dated October 11, 2010 (EC135-63A-017), which specifies removing the oil filter element and installing a corrugated washer. EC135-63A-017 also specifies reworking the affected filter housing upper part at the next repair or major overhaul of the main transmission, no later than 4,000 flight hours after receipt of the service bulletin. EASA classified this ASB as mandatory and issued AD 2010-0213 to ensure the continued airworthiness of these helicopters.

We have also reviewed ZF Luftfahrttechnik GmbH Service Instruction No. EC135FS108-1659-1009, dated September 14, 2010, which specifies procedures for

repairing the main transmission upper housing, and includes dimensions and tolerances for machining the housing upper part.

### **Proposed AD Requirements**

This proposed AD would require compliance with specified portions of the manufacturer's service information. This proposed AD would require:

- Within three months, installing a corrugated washer in the filter housing of the housing upper part; and
- Within 4,000 hours time-in-service, modifying each affected main transmission housing upper part by machining the oil filter bypass inlet.

### **Differences between this Proposed AD and the EASA AD**

The EASA AD applies to Model EC 635 helicopters. The proposed AD does not, as this model is not type-certificated in the U.S.

### **Costs of Compliance**

We estimate that this proposed AD would affect 227 helicopters of U.S. Registry. Based on an average labor rate of \$85 per work hour, we estimate that operators may incur the following costs in order to comply with this proposed AD. Installing the corrugated washer would require about .5 work hour, and required parts would cost about \$10, for a cost per helicopter of about \$53, and a total cost to the U.S. operator fleet of \$12,031. Machining the housing upper part would require about 5 work-hours and required parts would cost about \$73, for a total cost per helicopter of \$498, and a total cost to U.S. operators of \$113,046.

According to the ECD ASB, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do

not control warranty coverage by Eurocopter. Accordingly, we have included all costs in our cost estimate.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures

(44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

#### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new Airworthiness Directive (AD):

**EUROCOPTER DEUTSCHLAND GMBH:** Docket No. FAA-2013-0239; Directorate Identifier 2010-SW-087-AD.

##### **(a) Applicability.**

This AD applies to Eurocopter Deutschland GmbH Model EC135 P1, P2, P2+, T1, T2, and T2+ helicopters with a main transmission FS108 housing upper part, part

number (P/N) 4649 301 034 and a serial number listed in Table 1 of Eurocopter Alert Service Bulletin EC135-63A-017, Revision 0, dated October 11, 2010 (ASB EC135-63A-017), certificated in any category.

**(b) Unsafe Condition.**

This AD defines the unsafe condition as an improperly manufactured bypass inlet in the oil filter area. This condition could adversely affect the oil-filter bypass function, resulting in failure of the main transmission and subsequent loss of control of the helicopter.

**(c) Reserved.**

**(d) Compliance.**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions.**

(1) Within 3 months, remove the oil filter element and install a corrugated washer, P/N 0630100377, in the middle of the filter housing of the housing upper part as depicted in Figure 2 of ASB EC135-63A-017.

(2) Within 4,000 hours time-in-service or at the next main transmission repair or overhaul, whichever occurs first, machine the main transmission housing upper part in accordance with Annex A of ZF Luftfahrttechnik GmbH Service Instruction No. EC135FS108-1659-1009, dated September 14, 2010.

(3) Do not install a main transmission upper part, P/N 4649 301 034, on any helicopter unless it has been modified as required by paragraphs (e)(1) through (e)(2) of this AD.

**(f) Alternative Methods of Compliance (AMOC).**

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Chinh Vuong, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [chinh.vuong@faa.gov](mailto:chinh.vuong@faa.gov).

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information.**

The subject of this AD is addressed in European Aviation Safety Agency AD No. 2010-0213, dated October 14, 2010.

**(h) Subject.** Joint Aircraft Service Component (JASC) Code: 6320: Main Rotor Gearbox.

Issued in Fort Worth, Texas, on March 6, 2013.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

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